



N49RF ERROR SUMMARY

ENRR #22 PHNL - KONT

10 March 2016



Flight ID: 20160310N1

<u>Sensor or system</u>	<u>Number or Name</u>
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.4
Dewpoint Temp. Probe	TDM.1
Vertical Accelerometer	AccZfilterI.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.2
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.2
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/2016/MET/20160310N1

Local Met Data:	<u>Takeoff</u> - PHNL 2145Z	<u>Landing</u> - KONT 0455Z
Aircraft Static Pressure	1021.3 mb	981.0 mb
Tower Pressure (corrected)	1023.6 mb	983.1 mb

Notes:

Takeoff / Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

TDM.1 and TDM.2 are not rated for use under -50 deg C, so neither can be considered reliable for dew points colder than -50C. While normally reliable at lower altitudes, both dew point sensors displayed anomalously low values and abnormal oscillations during takeoff climb and descent to landing. Therefore, all flight level humidity data for this mission should be considered suspect.

AltGPS.3 was used as the source for absolute altitude. AltRa.1 displayed an interval of intermittent missing data points (NaNs) during climb after takeoff around 2201z and anomalous down-spiking periodically at mission cruise (approx 2210z - 2334z) but was not used for any derived meteorological parameters.

Other than the dew point sensors, there were no issues noted in the measured parameters used to calculate meteorological and navigational parameters.

The sonde at drop point #2 (2234z) failed at approx 40,000 feet (too late for a backup). The sonde at drop point #6 (2314z) failed immediately after launch and a backup sonde was good. Drop pt #20 was skipped and replaced by a midpoint drop halfway between points 35 and 36.

Expendable Type	Number deployed	Number good	Number of messages transmitted
GPS dropwindsonde	43	41	41

Flight Director:
Phone #:

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